make the decision to cannulate without "laying eyes" on the patient themselves.

Conclusions: The results of the study will be used to inform the creation of an ECMO Retrieval Program. Resources and training will be given to staff members to facilitate program implementation.

Keywords: ECMO; VVECMO; transport; retrieval; critical care; ECLS

Thymic Neoplasm Treatment and Presentation in Nova Scotia

S. Whitlock, R. Gonzalez, M. Ha, Z. Xu

Background and Objectives: Thymic neoplasms, including thymomas and thymic carcinomas, are rare anterior mediastinal malignancies with variable clinical behaviour and prognosis. Thymomas are generally more indolent, whereas thymic carcinomas are more aggressive and associated with poorer outcomes. This study evaluates treatment outcomes and prognostic factors associated with survival, recurrence, and disease progression among patients treated at the Nova Scotia Cancer Centre (NSCC) from 1979 to 2016. A secondary objective is to compare findings with a previous provincial study completed in 2009 to assess changes in management and outcomes over time.

Methods: A retrospective chart review was conducted of patients diagnosed with thymoma or thymic carcinoma and treated at the NSCC between 1979 and 2016. Demographic, clinical, pathological, and treatment-related data were collected, including age, histology, stage, tumour size, margin status, and resectability. Treatment modalities included surgery, radiotherapy, chemotherapy, and multimodal approaches. Outcomes assessed included overall survival, recurrence, disease progression, and, where available, cause of death.

Results: From the initial preliminary results, there were 136 patients found to have been eligible and involved in the statistical analysis. These patients were broken down into the following subgroups: 89% thymoma, 10% thymic carcinoma; predominantly early-stage, with 93% being surgically resected.When comparing the two subtypes of neoplasms, patients with thymic carcinomas were older and had more frequent lymphovascular invasion, metastasis, and recurrence. They were also more likely to receive radiation and chemotherapy as their therapy and had a significantly shorter follow-up period. This differs from patients with thymomas who were generally younger and had less aggressive disease. They had lower rates of lymphovascular invasion, metastasis, and recurrence. Treatment more commonly involved surgery alone or multimodal therapy.

Conclusions: From the initial findings, tumour size, capsular invasion, margin involvement, and death from any cause did not differ significantly between the groups.Both radiation oncology and pathology records were used as a combined dataset, allowing for more complete patient identification and characterization of the clinical data. The long study period from 1979 to 2016 also allowed for the capture of thymic neoplasm cases and treatment patterns over several decades. One key limitation of this research was incomplete historical data, as older records often had missing or unavailable clinical information. Additionally, the small sample size, which directly reflects the rarity of thymic neoplasms, limited the statistical analysis and the ability to draw definitive conclusions. Future studies should examine how histologic subtype and treatment modality relate to survival and recurrence, as well as identify clinical and pathological prognostic factors associated with outcomes. By answering these questions, the data could ultimately help inform treatment strategies and improve care for patients with thymic neoplasms. Multivariate and survival analyses are ongoing and will be used to provide additional information into key variables such as treatment outcomes and prognostic factors associated with these neoplasms.

Keywords: thymic neoplasms; thymoma; thymic carcinoma

Sex difference and non-hepatic surgical outcomes in Nova Scotian adults with liver cirrhosis

V. Straub, P. Gallagher, B. Gala-Lopez, K. Frizzell, L. Stewart, J. Zhu

Background and Objectives: Liver cirrhosis is a complex chronic condition that is associated with high rates of adverse health events, particularly with respect to surgical outcomes. This study aimed to underscore certain procedural and demographic conditions that predispose patients with cirrhosis to harmful perioperative outcomes. This population cohort study examined non-hepatic surgical outcomes in Nova Scotians with cirrhosis compared to those without cirrhosis with the purpose of optimizing perioperative conditions for the affected population. Primary outcomes included hospital length of stay (LOS), in-hospital mortality and post-operative complication rates, while also considering differences between sex and surgical type. Additionally, the study aimed to identify current barriers and inequities in access to surgical care in Nova Scotia.

Methods: We conducted a cohort analysis of non-hepatic surgeries in Nova Scotia from 2010 to 2022. Data extraction and analysis were performed by HDNS. Inclusion criteria were adults over 18 with or without cirrhosis who underwent one of the 5 types of surgeries within NS: open or laparoscopic surgical procedures were cholecystectomy, partial or total colectomy, hernia repair, large joint surgery, and bariatric surgery. Median follow-up was 90 days (IQR 90.00-99.00).

Results: A total of 42228 patients were included, 1630 with cirrhosis (44.0% female, mean age at time of surgery 62.0 yr (SD 14.57) and 40598 without (52.0% female, mean age 58.4 yr SD 16.84 yr). Cirrhosis was associated with a greater hazard of post-operative complications (HR 2.18, 95% CI 1.95 - 2.43; $p<0.0001$), prolonged LOS (HR for discharge 0.427, 95% CI 0.403 - 0.453; $p<0.0001$), and all-cause mortality at 90 days (HR 3.44, 95% CI 2.85 - 4.15, $p<0.0001$). Cirrhosis had no impact on in-hospital mortality (HR 1.179, $p = 0.84$). In the cirrhosis group, HR for post-operative complications was 3.57 (95% CI 3.00 - 4.23; $p<0.0001$) for hernia repair, while HR for cholecystectomy was 1.44 (95% CI 1.19 - 1.73; $p = 0.0001$).

Discussion: Patients with cirrhovsis had a greater burden of adverse perioperative outcomes, including 90-day mortality, prolonged hospital stay, and post-operative complications compared to those without cirrhosis. The degree of adverse outcomes experienced among cirrhosis patients varied depending on patient sex and type of surgery. These results indicate that evaluation of patient demographics and type of surgical intervention is important when risk stratifying patients with cirrhosis for surgery.

Conclusions: This study demonstrated the significant morbidity and mortality burden associated with surgical outcomes and cirrhosis, while also highlighting additional features that worsen this groups vulnerability to adverse outcomes. The findings of this study underscore the need for tailored pre-operative assessment and post-operative management for those with cirrhosis.

Keywords: liver cirrhosis; perioperative outcomes; mortality